

NOTES FROM THE BOTANIC GARDENS, SYDNEY.

No. 10.

BY J. H. MAIDEN AND E. BETCHE.

RUTACEÆ.

ZIERIA ASPALATHOIDES, A. Cunn., with pink flowers.

Pinnacle Mount, 30 miles south of Forbes (R. H. Cambage; September, 1900); The Rock, near Wagga Wagga (Mrs. A. R. Phillips; September, 1904).

All species of *Zieria* have white flowers, as far as we know, except *Z. aspalathoides*, which seems to have always pale to deep pink flowers. The specimens from The Rock are very pretty, with a striking colour-combination in the individual flowers; the petals have the colour of our Native Rose, *Boronia serrulata*; the anthers are brick-red, and the prominent glands of the disc are of a dark blue, almost black colour. The brick-red colour of the anthers is due to the pollen and not to the cells; therefore the anthers appear white in the young flowers, but red when they are ready to burst and shed the ripe pollen. *Zieria laevigata*, Sm., and *Z. Smithii*, Andr., have the same bright red pollen, but we cannot say whether that character goes through the whole genus; the colour of the pollen is so transitory that it can never be observed in herbarium specimens. Further observations in the field are wanted to settle that question.

BORONIA MOLLIS, A. Cunn.

Coff's Harbour to Grafton (J. H. Maiden and J. L. Boorman; November, 1903).

Boronia mollis is a very variable plant. The leaflets vary in number from 3 to 11 (Pittwater specimens); they vary greatly in

size and shape, and are sometimes densely white-tomentose underneath, and sometimes loosely tomentose and barely paler underneath.

Boronia Fraseri, Hook., varies little in all the stations from which we have seen it, from Menangle to the Hawkesbury River, and is really only the extreme glabrous form of *B. mollis*; the Coff's Harbour specimens are a connecting link between the two species; they have almost as perfectly glabrous leaves as *B. Fraseri* and resemble this species in habit, but they have the tomentose branches of *B. mollis*. We do not propose to unite *B. Fraseri* with *B. mollis*, because if all species were to be united between which isolated connecting links could be found, extensive changes would have to be made in Australian botanical nomenclature. We, however, desire to draw attention to the very close relationship of the two species.

BORONIA LEDIFOLIA, J. Gay, var. REPANDA, F.v.M. in Herb.

Stanthorpe, Queensland, on the borders of New South Wales (J. L. Boorman; July, 1904).

This well-marked variety is distinguished from the typical simple-leaved form by the leaves having a slightly undulate recurved margin, much similar to that in *Eriostemon difformis* or *E. hispidulus*, only less repand and tuberculate than in the former and more so than in the latter. It is an erect shrub about two feet high. Leaves 3 to 4 lines long, always simple in the specimens seen, not white underneath, but sparingly stellate-hairy. Flowers like the type. Our specimens from Stanthorpe are identical with specimens in the Melbourne Herbarium from Maryland, between New South Wales and Queensland, collected by E. Hickey (no date) and labelled by Mueller "*B. ledifolia*, var. *repanda*." The variety has not been published previously, as far as we are aware, and we recommend the adoption of Mueller's manuscript name for it.

BORONIA FALCIFOLIA, A. Cunn.

Stanthorpe, Queensland, near New South Wales border (J. L. Boorman; July, 1904).

These inland specimens are very different-looking from the specimens of the Northern Coast district from the Hastings River to Byron Bay, but cannot be separated even as a variety. In the coast specimens from the Hastings River to Byron Bay the flowers are mostly crowded in the axils of the upper leaves, so as to appear almost terminal, and the leaves are strictly 3-foliolate; while the Stanthorpe specimens are more sparsely flowered, the flowers extending down sometimes nearly to the base of the branches, and the leaflets are frequently again trifoliolate, all 3 or the upper ones only. It is an erect shrub, about 2 feet high.

PHILOTHECA AUSTRALIS, Rudge, var. REICHENBACHIANA, F.v.M
(*P. Reichenbachiana*, Sieb.).

Gungal, near Merriwa (J. L. Boorman; September, 1904).

A bushy shrub of compact habit, attaining 6 feet in this locality.

GEIJERA PARVIFLORA, Lindl.

Minembah, Whittingham, near Singleton (Denis Browne; August, 1904).

A western plant, hitherto only recorded in the east from the Page River.

STERCULIACEÆ.

RULINGIA PANNOSA, R.Br.

Mt. Warning, near Murwillumbah (W. Forsyth; November, 1898, and October, 1900); Murwillumbah (R. A. Campbell; January, 1904).

The leaves in these specimens are linear-lanceolate or broader and deeply 3-lobed, very obscurely serrate or occasionally quite entire, densely and closely white tomentose underneath. They come evidently near *R. salvifolia*, Benth., a species recorded from Southern Queensland, but not from this State, and connect the two species with each other.

RHAMNACEÆ.

CRYPTANDRA AMARA, Sm., var. FLORIBUNDA, var.nov.

Howell, New England; also Stanthorpe, Queensland, on the border of New South Wales (both, J. L. Boorman; July, 1904).

A very handsome, erect shrub, with slightly tomentose young branches, about 2 to 3 feet high. Leaves linear, with closely revolute margins concealing the underside, glabrous, nearly 2 lines long. Flowers very numerous, almost sessile in leafy clusters, forming spike-like racemes on the ends of the branches, sometimes exceeding $\frac{1}{2}$ inch in length.

This new variety seems to stand almost intermediate between *C. amara* and *C. lanosiflora*; it has the flowers of the former, but the leaves of the latter. It is the handsomest of all the *Cryptandras* we know, and is distinguished from the normal form by the comparatively long *Erica*-like leaves.

POMADERRIS PHYLICIFOLIA, Lodd., var. ERICOIDES, var. nov.

Tantawanglo Mountain (J. H. Maiden; December, 1896); Barber's Creek (H. J. Rumsey; October, 1898); Mongarlowe, near Braidwood (W. Bäuerlen; November, 1898); Mt. Kosciusko (J. H. Maiden and W. Forsyth; January, 1899); Jenolan Caves (W. F. Blakely; November, 1899); Mt. Wilson (J. Gregson; October, 1900).

There are two very distinct forms of *P. phyllicifolia* common in mountainous districts of this State. One has narrow leaves with the margins so much recurved that the underside is quite concealed; the other form has broader leaves, with less recurved margins, leaving the white underside exposed. The latter form is Loddiges' type, as figured in his 'Botanical Cabinet' (t. 120); the former is Hooker's *P. ericifolia*, united by both Bentham and Mueller with *P. phyllicifolia*. Though no sharp line can be drawn between the two forms, their extremes look very distinct; and as Bentham omitted to give a name to the narrow-leaved form, we propose now to name it var. *ericoides*.

Bentham mentions under *P. ledifolia* a doubtful plant collected by Mueller on the Macalister River, in fruit only, as *P. ledifolia*, A. Cunn., var. ? *angustifolia*; this is a mistake. One of Mueller's fruiting specimens from the Macalister River, which we obtained through Mr. Luehmann's kindness, agrees exactly with flowering specimens of a form of *P. phyllicifolia*, with *Leda*-like leaves,

from the Warrumbungle Ranges; *P. phyllicifolia* belongs to the group of species with apetalous flowers, and *P. ledifolia* has petals; therefore the two species cannot be mistaken when seen in flower.

SAPINDACEÆ.

DODONÆA FILIFOLIA, Hook.

Howell, about 15 miles east of Inverell (J. L. Boorman; June, 1904).

A new locality for a plant rare in this State.

DODONÆA TRUNCATIALES, F.v.M., var. *HETEROPHYLLA* var.nov.

Herb. Rev. Dr. Woolls, without locality or date; Bidden Road, Gilgandra, and Mudgee Road, 4 miles from Dubbo (R. H. Cambage; October, 1904).

Leaves from linear to linear-lanceolate, 2 to 3 inches long, entire or irregularly pinnate with 1 to 7 leaflets. In none of the specimens we have seen are the leaves regularly and constantly pinnate, as in Bentham's Series v. *Pinnatæ*. The leaves are generally simple, but occasionally more or less completely pinnate; the rhachis in the pinnate leaves is always winged, and the leaflets are articulate on the rhachis, very much like the irregularly compound leaves seen in *Atalaya*.

Perhaps we can hardly call this form a good variety, but it is interesting because it shows the tendency innate in *Dodonæas* to revert to the ancestral pinnate-leaved form. In experiments on the germination of *Dodonæas*, we have found that all those simple-leaved species, of which we could procure seeds, have pinnatifid first stem-leaves and gradually assume the adult foliage, just as the *Acacias* have first bipinnate leaves and gradually assume their characteristic phyllodia.

LEGUMINOSÆ (PAPILIONACEÆ.)

KENNEDYA PROCURRENS, Benth.

Mount Dangar, Gungal, near Merriwa (J. L. Boorman; September, 1904).

A very handsome tall climber, with stems fully 1 inch in diameter. The largest leaves in our specimens are $4\frac{1}{2}$ inches long by $3\frac{1}{2}$ inches wide; the flowers are about $\frac{1}{2}$ to $\frac{3}{4}$ of an inch long, and of a rich purple colour, drying to a pure mauve.

Bentham describes the plant in the 'Flora Australiensis' as prostrate, but this is doubtless a mistake caused by imperfect notes. Major Mitchell writes in his 'Journal of an Expedition into Tropical Australia' (p. 364): "I took a ride with Mr. Kennedy to the summit to which I had attached his name [Mt. Kennedy on the Maranoa] . . . a single specimen of a new *Kennedy* was gathered there." This single specimen is all the material Bentham had at his disposal when he described the plant, and Major Mitchell gives no information about its habit. The fruits and seeds are unknown to the present day.*

According to the collector's notes it is a much taller climber than *K. rubicunda*, and seems to resemble in habit the *Hardenbergia retusa* of tropical Queensland, which overruns tall shrubs and small trees on the edges of forests, almost smothering them under its mass of dense foliage and flowers. It is an extremely prolific flowerer, producing a stiff erect flowering-stalk at almost every leaf-axil for a distance of perhaps 20 or 30 feet from the top of the vine.

It seems to be a very rare plant. F. M. Bailey gives no additional locality to the original one (Mt. Kennedy) in his 'Queensland Flora'; and in the National Herbarium, Melbourne, only one locality is preserved, *i.e.*, Cungelella, probably a local name, which we cannot trace. Mr. Boorman states that on Mt. Dangar it grows on one spot only, and runs for a considerable length up the sides of a steep incline.

*POSTSCRIPT (*added 16: xii.: '04*).—Pods mostly $2-2\frac{1}{2}$ inches long and about $\frac{3}{8}$ inch broad, symmetrical, straight and flattish, the valves slightly convex. The valves densely hairy with white hairs, silky-pubescent inside. Seeds kidney-shaped, longitudinal, laterally attached to a funicle protruding into the cavity.

LEGUMINOSÆ (MIMOSÆÆ.)

ACACIA DOROTHEA, Maiden.

Abundant at Leura, Blue Mountains (R. H. Cambage and J. H. Maiden; December, 1903, and October, 1904).

ACACIA SALICINA, Lindl.

Minembah, Whittingham, near Singleton (Sylvester Browne; August, 1904).

A western plant, hitherto only recorded in the east from the Page River.

MYRTACEÆ.

EUGENIA CYANOCARPA, F.v.M., *Fragm.* ix. p. 146 (1875).

Hastings River (H. Beckler, ex Herb. Mueller, no date; E. Betche, February, 1882; G. R. Brown, December, 1893); Richmond River (W. Bäuerlen; December, 1891, January, 1895); Tweed River (W. Bäuerlen; April, 1897); Brunswick River (J. H. Maiden and J. L. Boorman; December, 1903); Port Hacking (J. H. Camfield, 1900; J. L. Boorman, July, 1904).

Amongst some of Mueller's type-specimens of *Eugenia*, which we had recently an opportunity of examining through the kindness of Mr. Luehmann, we found two New South Wales specimens of *Eugenia*, labelled respectively *E. cyanocarpa* and *E. oleosa*, var. *cyanocarpa*. Mueller gives, in the 'Fragmenta' quoted above, a provisional description of the plant, but does not include the name in his 'Census of Australian Plants.' These specimens are identical with specimens that had puzzled us for some years, and which were labelled provisionally in the Sydney Herbarium "*E. Coolminiana*? var." We now propose Mueller's name for the species.

E. cyanocarpa is not uncommon in brush forests from Port Hacking to the Tweed River, perhaps extending into Queensland, though Mr. F. M. Bailey does not mention a blue-fruited *Eugenia* in his recently published 'Queensland Flora.' Mueller gives the following localities: Botany Bay ("*fide* collectionis Gulliveri"), Hastings River (Henderson), and New England (Stuart). The

locality "Botany Bay" is incredible; the poor sandhills and swamps of Botany Bay are a very unlikely locality for it, but the rich semitropical brush-forests of the National Park are within a few miles' distance of Botany Bay, so that the mistake is of easy explanation. The chief characteristics of the plant are the blue, or rather purplish-blue, fruits and the acuminate leaves. The leaves vary from narrow-lanceolate to ovate, and from deep to pale green, but they are always distinctly acuminate ("folia e forma anguste lanceolata in late ovatam vergunt, sed semper in acumen acutum exeunt, nunc saturatius nunc pallidius virescunt" (Mueller). It is a rather small white-barked tree flowering in a very youthful state, so that it may be at times mistaken for a shrub.

E. Coolminiana, C. Moore, is probably a form of *E. cyanocarpa*, but the trees, both of which have been cultivated for many years in the Sydney Botanic Gardens, are very different in habit and horticulturally quite distinct, though we cannot point out a difference of specific value. *E. Coolminiana* is a shy-fruited tree with a dense heavy foliage; the leaves are thick, ovate and shortly or scarcely acuminate. *E. cyanocarpa* is a graceful loose-foliaged tree with thinner, narrower and much more acuminate leaves.

In the same volume of the 'Fragmenta' (ix. p. 146) Mueller described another *Eugenia* from the Tweed River (Carron) and from Rockingham Bay (Dallachy), and provisionally named it *E. papilionum* (from Dallachy's note that he saw numerous butterflies swarming round the flowers), but, as in *E. cyanocarpa*, he remained in doubt whether the name should stand as a species, or a variety of *E. oleosa*. The native name of the tree is given as "Coolmin," which suggests identity with C. Moore's *E. Coolminiana*, but the leaves are described as imperforate ("foliis crassioribus igitur imperforatis": Mueller), a character irreconcilable with *E. Coolminiana*. Of course native names are not by any means reliable guides; the aborigines, who doubtless eat the fruits of most *Eugenias*, may apply the name to several species with similar fruits; or the individual who imparts the information may not differentiate between similar species, especially when the

tree is not in fruit. The fruits of *E. papilionum* are not yet known.

Mueller's opinion that *E. cyanocarpa* and *E. papilionum* may be varieties of *E. oleosa*, F.v.M., seems to be unlikely; the narrow turbinate calyx of *E. oleosa* points to a fruit different in shape from the globular fruits of *E. cyanocarpa* and *E. Coolminiana*. To sum up, we think: All the blue-fruited Eugenias in New South Wales known at present are *E. cyanocarpa*, F.v.M. *E. Coolminiana*, C. Moore, is a variety of the same, with thicker, broader and less acuminate leaves, and is probably identical with Mueller's *E. papilionum*, in spite of the contradictory statement "foliis imperforatis."

MELALEUCA LINARIIFOLIA, Sm., var. ALTERNIFOLIA, var. nov.

Coff's Harbour to Grafton (J. H. Maiden and J. L. Boorman; November, 1903).

Leaves alternate, much narrower and usually shorter than the type. The whole plant is glabrous, and the flowers are loosely scattered in an interrupted spike. This form is rather common in the northern coast districts, and seems to extend from Stroud to the Richmond River. It is so well distinguished from the form with broader opposite leaves and dense spikes, which grows so abundantly in the sandstone country in the Port Jackson district, that it should be separated from it as a named variety.

DARWINIA TAXIFOLIA, A. Cunn.

Howell, about 15 miles east of Inverell (J. L. Boorman; June, 1904).

Common in the Port Jackson district and the Blue Mountains, extending southward to Victoria, but not previously recorded from north of the Hunter River.

UMBELLIFERÆ.

HYDROCOTYLE PTEROCARPA, F.v.M. New for New South Wales. Tuggerah Lakes (J. L. Boorman; February, 1904).

Previously recorded from Tasmania, Victoria and S. Australia.

COMPOSITE.

SOLIVA SESSILIS, Ruiz et Pav.

Newcastle (J. Gregson; September, 1903).

Reported first as naturalised in Moore Park, near Sydney, in these Proceedings for 1899 (p. 646); about a year later it was reported from Parramatta.

HEDYPNOIS CRETICA, Willd. (*Rhagadiolus Hedypnois*, All.).

Adelaide, South Australia (Max Koch; November, 1902); Norwood, S.A. (J. M. Black; November, 1903); Victoria (without special locality; H. St. Eloy D'Alton; 1903); and numerous localities from New South Wales.

This is a common introduced weed in this State, but is frequently mistaken for *Arnosericus pusilla*, Gaertn., a mistake assisted by the wrong inclusion of this plant in the list of naturalised plants published in the 'Handbook of the Flora of N.S. Wales.' *A. pusilla* is recorded by Bentham from Tasmania, but has never been found outside that State as far as we know. *Hedypnois cretica*, Willd., seems to be common also in Victoria and South Australia, but is not recorded for these States.

We have to thank Mons. G. Beauverd, of the Herbarium Boissier, Geneva, for confirming our determination of this plant. According to M. Beauverd, the Australian specimens are remarkable for their long, often branching, and glabrous flower-stalks.

CASSINIA DENTICULATA, R.Br.

The range of this species is given in the 'Handbook of the Flora of N.S. Wales' "from Clyde River to Port Jackson"; our most northern locality in the Herbarium is now Berowra, near Sydney, south of the Hawkesbury River; but F. M. Bailey records it in the 'Appendix to his Queensland Flora' (Vol. vi. p. 2007, 1902) from Killarney, so that the range for New South Wales should read "from Clyde River to Queensland."

OLEACEÆ.

JASMINUM SIMPLICIFOLIUM, Forst.

Grafton to Dalmorton (J. H. Maiden and J. L. Boorman; November, 1903).

Forms of transition between two recognised species are of rather common experience in the flora of New South Wales. This form of *Jasminum* is a striking case in point; it stands almost intermediate between *J. simplicifolium* and *J. suavissimum*, Lindl. The leaves are much narrower and the calyx-teeth longer than in all forms of *J. simplicifolium* we have previously seen, but, on the other hand, the leaves are broader and the calyx-teeth much shorter than in the typical *J. suavissimum*. On the whole, taking habit and all minor characters into consideration, we think it should be placed with *J. simplicifolium*, as an extreme narrow-leaved form.

ASCLEPIADACEÆ.

PARSONSIA ROTATA, sp. nov.

Hastings River (Forester G. R. Brown; no date; about 1890); Lismore (W. Bäuerlen; February, 1891); Burringbar, between Tweed and Richmond Rivers (E. Betche; April, 1896); Port Macquarie (J. H. Maiden; November, 1897).

A tall glabrous climber. Leaves from elliptical to lanceolate, nearly equally rounded at both ends and abruptly drawn out to a point, or gradually narrowed at the apex and almost truncate at the base, rarely narrowed at the base, dark green above, paler underneath, the largest seen $4\frac{1}{2}$ inches long and $2\frac{1}{2}$ inches broad. Petiole $\frac{1}{4}$ to above $\frac{1}{2}$ inch long. Flowers axillary and terminal, few in the inflorescence (not above 8 in all specimens seen), in an almost umbel-like contracted cyme, the common peduncle about $\frac{1}{2}$ inch long, the pedicels shorter. Calyx-lobes about 1 line long, rather unequal. Corolla rotate, cream-coloured, perfectly glabrous outside, the tube as long as the calyx, the spreading lobes oblong, fully twice as long, with a dense fringe of hairs at the base, extending in a ring round the top of the tube. Stamens inserted near the base of the corolla, with long filaments spirally twisted

together, the anther-cone and parts of the filaments exerted from the corolla-tube. Hypogynous glands somewhat united at the base. Fruits not seen.

The great variability in the shape of the leaves doubtless depends much on the locality, and probably a great deal on the part of the plant from which the leaves are taken. The Burringbar specimens, with uniform leaves of an almost mathematically correct elliptical shape, were collected from the lower part of the stem in a high forest; while the Hastings River specimens, with variable leaves, were taken from the tops of the vines, probably on the edges of brush. It is only natural to expect that the shaded lower leaves of tall forest vines, scrambling up to the tops of the trees in search of light, should be different from the upper leaves enjoying the full light of the sun.

In affinity this new species is nearest allied to *P. lanceolata*, R.Br., but is sharply distinguished from it chiefly by the shape, size and indumentum of the corolla, and, above all, by the dense ring of hairs in the throat of the corolla.

In working at this species, we carefully compared it with Mr. R. T. Baker's *P. Paddisoni*, described and figured in these Proceedings (Vol. xxiv., 1899, p. 385), and we are forced to the conclusion that *P. Paddisoni* is identical with *P. lanceolata*. Mr. Baker writes (p. 386): "*P. Paddisoni* differs from *P. lanceolata*, R.Br., in its axillary cymes, shape of leaves, and calyx-lobes being equal." These distinctions are all trivial. Terminal and axillary inflorescences occur commonly together in *Parsonsia*, and Bentham describes the inflorescence of *P. lanceolata* in the following words:—"Cymes terminal or on short axillary branches," a description which agrees well with Mr. Baker's plate of his species. The shape of the leaves of *P. Paddisoni* is described by Mr. Baker as: "obovate, elliptical-lanceolate, abruptly acuminate." Bentham describes the leaves of *P. lanceolata* as: "elliptical-oblong or lanceolate, more rarely oval or almost orbicular, obtuse mucronate or shortly acuminate, not cordate, the margins usually recurved." Mueller, in his 'Fragmenta' (Vol. v., p. 126), describes the leaves of *P. lanceolata* (as *P.*

glaucescens) as "ovato- v. oblongo-lanceolatis vel fere ovatis obtusis et brevissime acuminatis v. apiculatis." Surely there is no essential difference in Mr. Baker's description of the leaves of *P. Paddisoni* and Bentham and Mueller's description of the leaves of *P. lanceolata*, especially as both are glabrous and both are paler underneath.

There remains only the difference of the "equal calyx-lobes." R. Brown says nothing about "unequal calyx-lobes" in his very short original description of *P. lanceolata*; Mueller also says nothing about "unequal calyx-lobes" in his very detailed description of *P. lanceolata* (as *P. glaucescens*) in the 'Fragmenta.' Bentham alone adds this character to the description of the species.

The calyx-lobes in our specimens of *P. lanceolata* are long and narrow, exactly as figured in *P. Paddisoni*; they are mostly, but not always, rather unequal in length, but the character is not by any means conspicuous nor of importance.

The six Australian species of *Parsonsia* are distinguished chiefly by the shape of the corolla, and by the absence or presence of variously disposed reversed hairs or bunches of hairs in the corolla-tube or throat; by the anther-cone being enclosed in or exerted from the corolla-tube; and by the filaments being short and free in some species, or long and united and generally spirally twisted in others. If two plants agree in all these essential characters, as *P. lanceolata* and *P. Paddisoni* do, surely a new species should not be established on such trivial grounds as advanced in support of *P. Paddisoni*; we cannot even admit it as a variety; it is simply the western form of *P. lanceolata*.

R. Brown's description of *P. lanceolata* in his 'Prodromus' (p. 466) is a striking instance of the confusion that may be caused by too short and superficial descriptions of new species. His whole description is comprised in the six words: "cymis bifidis, foliis lanceolatis acuminatis glabris," without a word about the flowers. In Brown's time this description was sufficient to distinguish the few Australian species known, but at the present day it would be quite inadequate without access to his types.

PARSONSIA LANCEOLATA, R.Br., var. MOLLIS, F.v.M.

Townsville, Queensland (E. Betché; August, 1901).

This seems to be identical with R. Brown's *P. mollis*, united by both Bentham and Mueller with *P. lanceolata* as a tomentose variety. The flowers of our Townsville specimens differ from the flowers of the typical *P. lanceolata* in the following characters: the calyx-lobes are shorter and more obtuse, the corolla-lobes are more obtuse, the anther-cone is shorter and more obtuse, and the filaments are not twisted in the flowers we have examined, though they are united in the upper part.

PARSONSIA LEICHHARDTII, F.v.M.

Blue Mountains (E. Betché; July, 1888; J. H. Maiden; April, 1899; J. Gregson; February, 1903).

This species seems to be common in the Blue Mountains, but it is not often collected, probably because of its usual winter-flowering habit. The Blue Mountain specimens differ in some points from the type-specimen collected by Dr. Leichhardt at Wide Bay, Queensland, the only specimen which was at Bentham's disposal when he drew up the description for the 'Flora Australiensis.' The corolla of the Wide Bay specimens is described as "densely bearded in the throat," while in the Blue Mountain specimens the throat of the corolla is only slightly hairy, with short reversed hairs; further, the hypogynous glands are described by Bentham as "emarginate" and by Mueller as "two-lobed," while they are quite entire in our specimens. There is no other essential difference between the Queensland and New South Wales specimens; the latter are always quite glabrous, with narrower leaves, hardly cordate at the base, but the plants are not sufficiently distinguished to separate them as varieties.

SOLANACEÆ.

SOLANUM VIOLACEUM, R.Br., var. ALBUM, var.nov.

Mt. Dangar, Gungah, near Merriwa, also Wallsend (both J. L. Boorman; September, 1904).

The white-flowering form of this handsome *Solanum* seems to be by no means uncommon, but it has never been recorded, as far as we know. The specimens of the two localities are very sparingly prickly, in fact one has to look carefully to find an occasional prickle; and the calyx-teeth are hardly acuminate. Bentham's character of this species, "calyx-teeth acuminate," is deceptive; the calyx-teeth are generally drawn out into a point, but sometimes so shortly that they are almost or quite obtuse in the bud or young flower, though they change in fruit.

SOLANUM NEMOPHILUM, F.V.M.

Drake (J. L. Boorman; October, 1901); Grafton district, near Railway Survey Camp between Grafton and Glenreagh (J. H. Maiden and J. L. Boorman; November, 1903). New for New South Wales.

Previously recorded from Queensland only. Brisbane River is the most southern locality recorded by F. M. Bailey in his 'Queensland Flora.'

SCROPHULARIACEÆ.

VERONICA PERFOLIATA, R.Br.

The range of this species in New South Wales is recorded at present as coast district to tablelands, from Victoria to Mudgee; and we have no evidence in the Herbarium of a more northern locality. F. M. Bailey gives in the 'Appendix to his Queensland Flora' (1902) "Charlotte Plains" as a new locality, so that the range of this species extends now from south to north right through New South Wales, though common in the south and evidently rare in the north.

ACANTHACEÆ.

HYGROPHILA ANGUSTIFOLIA, R.Br.

Casino, in swampy ground (E. Betche; April, 1896). New for New South Wales.

Previously recorded from Queensland, extending from Moreton Bay to the farthest north, and beyond Australia to tropical Asia. There seems to be a doubt about the colour of the flowers of the

Australian form. The Asiatic specimens have pale purple flowers, according to C. B. Clarke; Bentham describes the flowers of the Australian specimens as "purple or pale blue (or yellow according to Dallachy)." Our Casino specimens, as well as Queensland specimens from Cairns, have all yellow flowers.

PROTEACEÆ.

ISOPOGON DAWSONI, R. T. Baker.

Mt. Dangar, Gungah, near Merriwa (J. L. Boorman; September, 1904).

Mr. Baker's type-specimens were found in 1893 in the Murrumbidgee Ranges, Goulburn River. Six years later Mr. Forsyth discovered it on the Nepean River; and now we record a third locality for this rare plant.

According to Mr. Boorman's notes it is a tree with a single stem, 3 to 6 inches in diameter, about 8 to 12 feet high (it attains 20 feet in height according to Mr. Baker); the leaf-segments in our specimens are generally rather narrower and shorter than in the figure of the plant.*

GREVILLEA GAUDICHAUDI, R.Br.

Wentworth Falls (J. H. Camfield; October, 1896); Katoomba (W. Forsyth; November, 1904). (Brown's type, in Gaudichaud, came from "Vallée de Jamieson.")

"This plant was found near the town of Katoomba growing in juxtaposition with plants of *Grevillea laurifolia*, Sieb. It has entirely the same habit as the latter species. The flowers in the field are also of the same colour, and the plant might easily be passed by for *Grevillea laurifolia*."

"The plant seems to be very local in its distribution, no specimens being found outside a radius of about 50 yards, and not more than half a dozen plants seen altogether" (W. Forsyth).

R. Brown described the species first in Gaudich., Freyc. Voy. Bot. 443. We have also R.Br.'s description in 'Proteaceæ Novæ' (1830), p.22, and this description agrees word for word with our

* These Proceedings, (2), Vol. ix, 1894, pl. xiv.

specimens. R. Brown says nothing about the habit of the plant in either of these works, nor does the figure help us in this respect; and as Bentham had only seen herbarium specimens, he seems to assume too much when he writes: "An erect shrub with the habit, inflorescence and flowers of *G. acanthifolia*."

Cunningham describes it as "*G. acanthifolia*, var. *quercifolia*" (Cunningham MSS.); this may have misled Bentham, or possibly the species may be variable in habit and not always so prostrate as in our specimens.

EUPHORBIACEÆ.

RICINOCARPUS BOWMANI, F.V.M.

The Rock, near Wagga Wagga (Mrs. A. R. Phillips; September, 1904).

The specimens sent by Mrs. Phillips are remarkably beautiful, with larger flowers and broader leaves than ever recorded. The leaves are $\frac{1}{2}$ to $\frac{3}{4}$ inch long, linear-oblong with recurved margins, dark green above, white-tomentose underneath (in the typical form the margins of the leaves are revolute, generally completely concealing the under surface); the flowers attain fully $1\frac{1}{8}$ inches in diameter, and are of bright rose colour bleaching to white as they fade away. The exceptional size of the flowers may perhaps be attributed to the favourableness of the season.

CASUARINACEÆ.

CASUARINA LUEHMANNI, R. T. Baker.

Minembah, Whittingham, near Singleton (Roderick Browne; August, 1904).

Most eastern locality recorded.

CYPERACEÆ.

SCHÆNUS SCULPTUS, Bœck.

Mt. Dangar, Gungah, near Merriwa (J. L. Boorman; September, 1904).

Recorded by us as new for New South Wales in these Proceedings for 1903 (p. 922); we now add a third locality to the two New South Wales localities previously recorded.